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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

GOOSEBERRY

UPOV Code: RIBES_UVA

Ribes uva-crispa L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Germany

*to be considered by the Technical Working Party for Fruit Crops at its fortieth session,
to be held in Angers, France, from September 21 to 25, 2009*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Ribes uva-crispa</i> L.	Gooseberry	Stachelbeere

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Ribes uva-crispa* L. and of varieties of hybrids between that species and other species as long as the latter varieties are similar to those of *Ribes uva-crispa* L.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of plants.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

5 plants (on own roots).

SK, RO: agree.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. Method of Examination

3.1 *Number of Growing Cycles*

3.1.1 The minimum duration of tests should normally be two independent growing cycles

3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new season buds.

3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

3.3 *Conditions for Conducting the Examination*

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.2 In particular, it is essential that the plants produce a satisfactory crop of fruit in each of the two growing cycles.

3.3.3 The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

MG: single measurement of a group of plants or parts of plants

MS: measurement of a number of individual plants or parts of plants

VG: visual assessment by a single observation of a group of plants or parts of plants

VS: visual assessment by observation of individual plants or parts of plants

3.4 *Test Design*

Each test should be designed to result in a total of at least 5 plants.

3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants.

3.6 *Additional Tests*

Additional tests, for examining relevant characteristics, may be established.

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the

recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.2 *Uniformity*

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 5 plants, no off-types are allowed.

4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

(a) Fruit: color (characteristic 33)

(b) Time of beginning of fruit ripening (characteristic 42)

RO: agree.

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 *Legend*

(*) Asterisked characteristic – see Chapter 6.1.2

QL: Qualitative characteristic – see Chapter 6.3

QN: Quantitative characteristic – see Chapter 6.3

PQ: Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS: See Chapter 3.3.3

(a)-(g) See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.2

7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. VG Plant: vigor						
QN (a)	very weak					1
	weak				Catherina	3
	medium				Hönings Früheste	5
	strong				Whinham's Industry	7
	very strong				Rochusbeere	9

PL: to add example variety 'Korsun' for state 5, 'Mucurines' for state 7, and 'Invicta' for state 9.

NL: to check whether the example varieties for this characteristic and the following ones could be replaced by better known ones.

2. VG Plant: density height						
QN (a)	very sparse short					1
	sparse short				Spinefree	3
	medium				Lovett's Triumph Rokula	5
	dense tall				Rochusbeere	7
	very dense tall				Grüner Edelstein Reflamba	9

RO, SK: agree to changes

3. VG Plant: shape						
(*)						
(+)						
PQ (a)	obovoid				Hönings Früheste	1
	globose				Runde Gelbe	2
	transverse ellipsoid				Ingelheimer Rote	3

PL: to add example variety 'Invicta' for state 2 and 'Remarka' for state 3.

NL: to add example varieties 'Golda', 'May Duke' and 'Pax' for state 1, to replace the existing example variety for state 2 by 'Invicta', to replace the existing variety for state 3 by 'Achilles'.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
4.6	VG	Plant: number of basal shoots					
QN	(a)	few			Whinham's Industry	3	
		medium			Golden Lion	5	
		many			Hönings Früheste	7	
PL: to add example variety 'Korsun' for state 3 and 'Invicta' for state 7.							
5.	VG	One-year-old shoot: attitude					
(*)							
QN	(b)	upright				1	
		oblique			Hönings Früheste	2	
		horizontal			Runde Gelbe	3	
PL: to have example varieties 'Residenta' and 'Gelbe Triumph' for state 1, to add example variety 'Invicta' for state 2 and 'Korsun' for state 3.							
RO, SK: agree to new wording.							
6.	VG	One-year-old shoot: curvation					
QN	(b)	very weak			Reverta	1	
		weak			Whinham's Industry	3	
		medium			Risulfa	5	
		strong			Ingelheimer Rote	7	
		very strong			Lepac	9	
PL: to add example variety 'Rolonda' for state 1, 'Invicta' for state 3, 'Hinnonmäen Punainen' for state 5 and 'Hinnonmäen Keltainen' for state 7.							
RO, SK: agree to new wording.							
7.	VG	Shoot: prickles					
(*)							
QL	(b)	absent			Captivator	1	
		present			Reflamba	9	

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
8.	VG	Shoot: number of single prickles					
QN	(b)	nil or very few			Redeva	1	
		few			Rokula	3	
		medium			Rolonda	5	
		many			Remarka	7	
		very many				9	

PL: to add example variety 'Whitesmith' for state 1, 'Whinham's Industry' for state 3, 'Invicta' for state 5, 'Hinnonmäen Keltainen' for state 7 and to have example variety 'Rzeszowski' for state 9.

9.	VG	Shoot: number of double prickles					
QN	(b)	nil or very few				1	
		few			Invicta	3	
		medium			Whinham's Industry	5	
		many			Reverta	7	
		very many				9	

PL: to have example variety 'Remarka' for state 1 and to add example variety 'Riversa' for state 7.

10.	VG	Shoot: number of triple prickles					
QN	(b)	nil or very few				1	
		few			Invicta	3	
		medium			Whinham's Industry	5	
		many			Reverta	7	
		very many				9	

PL: to have example varieties 'Hinnonmäen Keltainen', 'Invicta' and 'Korsun' for state 1 and to add example variety 'Riversa' for state 5, 'Whitesmith' for state 7.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
11.	VG	Shoot: number of points of attachment of prickles					
(*)							
QN	(b)	very few				1	
		few	to be deleted			3	
		medium				5	
		many				7	
		very many				9	
NL, RO, SK: agree to delete.							
12.	VG	Shoot: number of points of attachment of prickles on upper third					
(*)							
QN	(b)	very few				1	
		few			Gelbe Triumph	3	
		medium			Hönings Früheste	5	
		many			Whinham's Industry	7	
		very many				9	
PL: to have example variety 'Rokula' for state 1 and to add example variety 'Hinnonmäen Keltainen' for state 5.							
13.	VG	Shoot: number of bristles on upper third					
(*)							
QN	(b)	nil or very few			Mai Duke	1	
		few			Rote Orléans	3	
		medium			Werdersche Frühe Mark	5	
		many			Hönings Früheste	7	
		very many				9	
PL: to add example variety 'Weiße Triumph' for state 1 and 'Invicta' for state 5.							

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
14.	VG	Bud: position in relation to shoot					
QN	(b)	adpressed			Whinham's Industry	1	
		moderately held out			Whitesmith	2	
		strongly held out			Weiße Volltragende	3	
NL, RO, SK: agree to new characteristic. NL: to read "Vegetative bud:".							
15.	VG	Bud: size					
QN	(b)	small				1	
		medium				2	
		large				3	
NL: to change into "Vegetative bud: length"; to have 9 states instead of 3.							
16.	VG	Bud: shape of apex					
QN	(b)	narrow acute				1	
		broad acute				2	
		rounded				3	
NL, RO, SK: agree to new characteristic. NL: to read "Vegetative bud:".							
17.	VG	Young shoot: antho- cyanin coloration					
14. (*)							
QN	(c)	absent or very weak			Goliath	1	
		weak			Whinham's Industry	3	
		medium			Risulfa	5	
		strong			Siloba	7	
		very strong				9	
PL: to add example variety 'Hinnonmäen Keltainen' for state 1, 'Invicta' for state 3 and 'Riversa' for state 5.							

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18. 15.	VG	Young leaf: green coloration				
QN	(d)	very light			Summersgold	1
		light			Mai Duke	3
		medium			Rote Frankfurter	5
		dark			Resistenta	7
		very dark			Reverta	9

PL: to add example variety 'Hinnonmäen Keltainen' for state 1, 'Whitesmith' for state 3, 'Winham's Industry' for state 5, 'Mucuri-nes' for state 7 and 'Riversa' for state 9.

SK: to read "Young leaf: intensity of green coloration"

19. 16. (*)	VG	Young leaf: anthocyanin coloration				
QN	(d)	absent or very weak			Goliath	1
		weak			Gelbe Triumph	3
		medium			Whitesmith	5
		strong			Risulfa	7
		very strong				9

PL: to add example variety 'Nieslukovskij' for state 1 and 'Mucurines' for state 7.

20.	VG	Leaf: length				
QN	(e)	short				3
		medium				5
		long				7

PL, RO, SK: agree to new characteristic.

PL: to have example variety 'Korsun' for state 3 and 'Invicta' for state 5.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
21.	VG	Leaf: width					
QN	(e)	narrow				3	
		medium				5	
		broad				7	
		very broad				9	

PL, RO, SK: agree to new characteristic.

PL: to have example varieties/variety 'Remarka' and 'Hinnonmäen Punainen' for state 3, 'Korsun' for state 5 and 'Winham's Industry' for state 7.

22.	VG	Leaf: length/ width ratio					
QN	(e)	small				3	
		medium				5	
		large				7	

NL, RO, SK: agree to new characteristic.

NL: to read "Leaf: ratio length/width".

23.	VG	Fully developed leaf: size of blade					
17.	(*)						
QN	(e)	small	to be deleted		Golde	3	
		medium			Gelbe Triumph	5	
		large			Lady Delamere	7	

NL, RO, SK: agree to delete.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
24. 18.	VG Fully developed leaf: angle of base of blade with petiole					
(+)						
QN	(e) very acute				Risulfa	1
	acute				California	3
	right angle				Rote Orléans	5
	obtuse				Lauffener Gelbe	7
	very obtuse					9

PL: to add example varieties/variety 'Rokula' and 'Riversa' for state 1, 'Hinnonmäen Keltainen' for state 3, 'Pax' for state 5 and 'Korsun' for state 7.

NL: to read "Leaf:".

25. 19.	VG Fully developed leaf: glossiness of upper side					
QN	(e) weak				Maurers Sämling	3
	medium				Rote Orléans	5
	strong				Crown Bob	7

PL: to add example varieties 'Korsun' and 'Rolonda' for state 3, 'Hinnonmäen Punainen' for state 5 and 'Whitesmith' for state 7.

NL: to read "Leaf:".

26. 20.	VG Inflorescence: predominant number of flowers					
QL	(f) one				Hönings Früheste	1
	two				Rokula	2
	three					3
	more than three					4

PL: to add example variety 'Hinnonmäen Keltainen' for state 2.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
27. 21.	VG	Flower: anthocyanin coloration of sepal				
QN	(f)	absent or very weak			Spinefree	1
		weak			Crown Bob	3
		medium			Whinham's Industry	5
		strong			Reverta	7
		very strong				9

PL: to add example variety 'Hinnonmäen Keltainen' for state 3 and 'Invicta' for state 7.

28. 22.	VG	Flower: anthocyanin coloration of ovary				
QN	(f)	absent or very weak			Rote Frankfurter	1
		weak			Grüne Kugel	3
		medium			Gelbe Triumph	5
		strong			Reverta	7
		very strong				9

PL: to add example variety 'Winham's Industry' for state 3 and 'Riversa' for state 7.

29. 23. (*)	VG	Flower: pubescence of ovary				
QN	(f)	absent or very weak			Rochusbeere	1
		weak			Oakmere	3
		medium			Dams Mistake	5
		strong			Strakls Mehlaufreie	7
		very strong				9

PL: to add example variety 'Remarka' for state 1, 'Mucurines' for state 3, 'Rokula' for state 5, 'Invicta' and 'Reflamba' for state 7.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30.	VG					
24.						
(*)						
QN	(g)					
	very small				Amerikanische Gebirgstachelbeere	1
	small				Early Green	3
	medium				Gelbe Triumph	5
	large				Grüne Kugel	7
	very large				Catherina	9
PL: to add example variety 'Hinnonmäen Punainen' for state 3 and 'Hinnonmäen Keltainen' for state 9.						
SK: to insert new characteristic "Fruit: length", to insert new characteristic "Fruit: width".						
31.	VG/	Fruit: ratio length/				
25.	MG	width				
QN	(g)	small			Early Green	3
		medium			Rote Orléans	5
		large			Grüne Flaschenbeere	7
NL: to replace the existing example varieties for state 1 by 'Golda' and 'May Duke', and those for state 2 by 'Achilles' and 'Pax'.						
PL: to add example variety/varieties 'Pax' for state 1, 'Invicta' and 'Hinnonmäen Keltainen' for state 2, 'Rolonda' and 'Peggy' for state 3.						
32.	VG	Fruit: shape				
26.						
(*)						
(+)						
PQ	(g)	globose			Bila	1
		ellipsoid			Weiße Volltragende	2
		pyriform			Grüne Flaschenbeere	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
33.	VG Fruit: color					
27.						
(*)						
PQ	(g) yellow				Golden Lion	1
	yellow green				Gelbe Triumph	2
	green with white tinge				Weißer Neckartaler	3
	green				Grüne Kugel	4
	medium red				Rokula	5
	dark red				Maiherzog, Remarka	6

NL: to add example variety 'Golda' for state 1, 'Invicta' for state 3, to replace the existing varieties in state 6 by 'May Duke', 'Achilles', 'Pax' and 'Whinham's Industry'.

PL: to add example variety/varieties 'Invicta' for state 2, 'Whitesmith' for state 3, 'Pax', 'Korsun' and 'Rolonda' for state 5, 'Niesluhovskij' and 'Maurers Sämling' for state 6.

SK: to add new example variety 'Rubikon' for state 6.

RO: to read "dark red to black" with the example variety 'Cernomore' for state 6.

34.	VG Fruit: bloom					
28.						
QN	(g) absent or very weak				Mai Duke	1
	weak				Whitesmith	3
	medium				Grüne Kugel	5
	strong				Resistentia	7
	very strong				Rochusbeere	9

NL: to replace example variety by 'Whinham's Industry' for state 5.

PL: to add example variety 'Lady Delamare' for state 1, 'Robustenta' for state 7.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota	
35.	VG	Fruit: hairiness					
29.							
(*)							
QN	(g)	absent or very weak				Remarka	1
		weak				Bila	3
		medium				Golden Lion	5
		strong				Hönings Früheste	7
		very strong					9

NL: to add example varieties 'Golda' and 'May Duke' for state 1; to replace the existing example variety in state 3 by 'Achilles' and 'Invicta' and the existing variety in state 5 by 'Pax' and 'Whiham's Industry'.

PL: to add example varieties/variety 'Riversa' and 'Mucurines' for state 1, 'Whitesmith' for state 3 and 'Invicta' for state 7.

36.	VG	Fruit: veining					
30.							
QN	(g)	weak				Mauks Frühe Rote	3
		medium				Gelbe Triumph	5
		strong				Rote Preis	7

PL: to add example variety 'Korsun' for state 3, 'Mucurines' for state 5 and 'Invicta' for state 7.

37.	VG	Fruit: toughness of skin					
31.							
QN	(g)	weak				Mauks Frühe Rote	3
		medium				Gelbe Triumph	5
		strong				Rote Orléans	7

PL: to add example variety 'Winham's Industry' for state 3, 'Rokula' for state 5 and 'Mucurines' for state 7.

38.	VG	Fruit: elongation of base					
32.							
(+)							
QN	(g)	short				Mai Duke	3
		medium				Werdersche Frühe Mark Invicta	5
		long				Weißer Kristall	7

PL: to add example variety 'Hinnonmäen Keltainen' for state 3, 'Pax' for state 5 and 'Invicta' for state 7.

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
42.	MG	Time of beginning of				
36.		fruit ripening				
(*)						
QN	(g)	very early			Risulfa	1
		early			Mauks Frühe Rote	3
		medium			Rote Frankfurter	5
		late			Rote Orléans	7
		very late			Green Gem	9

NL: to replace the existing example variety in state 3 by 'May Duke', that one in state 5 by 'Whinham's Industry' and that one in state 7 by 'Achilles'.

PL: to add example variety 'Hinnonmäen Punainen' for state 3, 'Invicta' for state 5 and 'Hinnonmäen Keltainen' for state 7.

SK: agree to amended wording.

8. Explanations on the Table of Characteristics

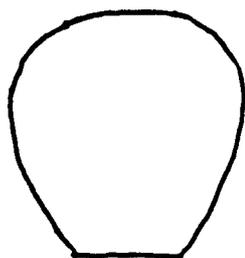
8.1 *Explanations covering several characteristics*

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

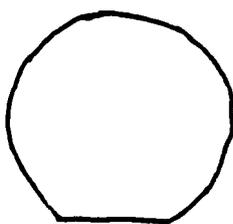
- (a) All observations on the whole plant should be made during the dormant season before pruning.
- (b) All observations on the prickles and bristles should be made on one-year-old shoots during the dormant season before pruning. Prickles should be counted on at least 1 m of shoot.
NL: to read "Prickles should be assessed over a length of 25 cm, in the middle of a shoot."
- (c) All observations on the young shoot should be made after the beginning of growth on shoots of approximately ~~25~~ 10 cm in length.
- (d) All observations on the young leaf should be made after the beginning of growth when the leaflets are about 2 cm wide and the shoots 3 to 5 cm long.
- (e) All observations on the mature leaf should be made at the stage of fruit maturity on the upper third of typical shoots.
- (f) All observations on the flower should be made at the time of full flowering.
- (g) All observations on the fruit should be made at the time when the fruit is physiologically ripe.

8.2 *Explanations for individual characteristics*

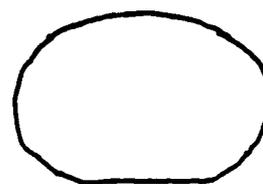
Ad. 3: Plant: shape



1
obovoid



2
globose



3
transverse ellipsoid

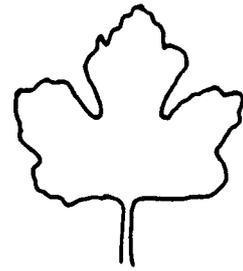
Ad. 24: Fully developed leaf: angle of base of blade with petiole



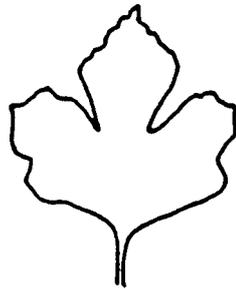
1
very acute



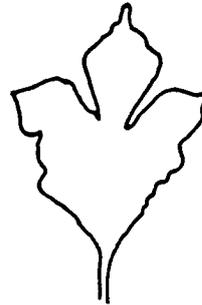
2
acute



3
right angle

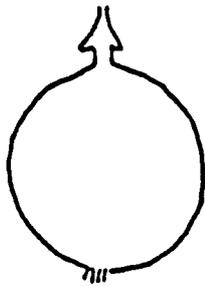


7
obtuse

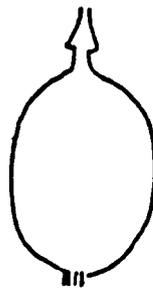


9
very obtuse

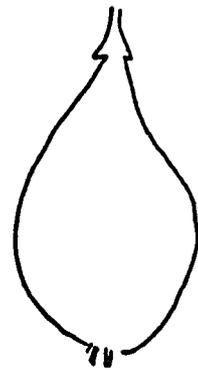
Ad. 32: Fruit: shape



1
globose

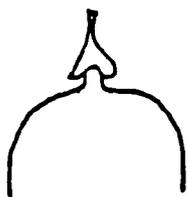


2
ellipsoid

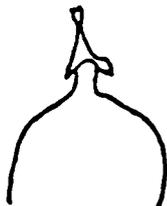


3
pyriform

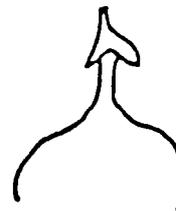
Ad. 38: Fruit: elongation of base



3
short

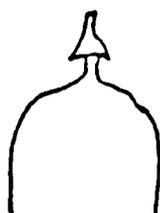


5
medium

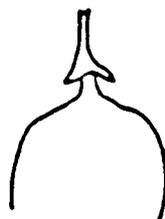


7
long

Ad. 39: Fruit: length of peduncle



3
short



5
medium



7
long

8.3 *Synonyms of the example varieties*

Example varieties	Synonym(s)
Early Green Haire	Early Green, Grüne Deutsche
Hinnonmäen Keltainen	Hinnonmäki gelb, Hinnonmäki Gul
Hinnonmäen Punainen	Hinnonmäki rot, Hinnonmäki Röd, Lepaan Punainen
Whitesmith	Weißer Triumph
Winham's Industry	Rote Triumph

9. Literature

AVD för Fruktoch Bärödling: Internordic Index of Ribes and Rubus Cultivars, Alnarp, SE

Sorge, P., 1984: Beerenobstsorten. Verlag J. Neumann-Neudamm, Melsungen, DE,
(259 pp.)

**NL: to add new literature Hoffman, M.H.A., 2005: List of names of woody plants.
Praktijkonderzoek Plant & Omgeving BV, Boskoop, NL, (871 pp.)**

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text" value="Ribes uva-crispa L."/>	
1.2 Common name	<input type="text" value="Gooseberry"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#4. Information on the breeding scheme and propagation of the variety</p> <p>4.1 Breeding scheme</p> <p>Variety resulting from:</p> <p>4.1.1 Crossing</p> <p>(a) controlled cross [] (please state parent varieties)</p> <p>(b) partially known cross [] (please state known parent variety(ies))</p> <p>(c) unknown cross []</p> <p>4.1.2 Mutation [] (please state parent variety)</p> <p>4.1.3 Discovery and development [] (please state where and when discovered and how developed)</p> <p>4.1.4 Other [] (please provide details)</p> <p>4.2 Method of propagating the variety</p> <p>4.2.1 Vegetative propagation</p> <p>(a) cuttings []</p> <p>(b) <i>in vitro</i> propagation []</p> <p>(c) other (state method) []</p> <p>4.2.2 Seed []</p> <p>4.2.3 Other [] (please provide details)</p>		

Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).</p>			
Characteristics	Example Varieties	Note	
<p>5.1 Plant: shape (3)</p>			
<p>ovoid</p>	<p>Hönings Früheste</p>	<p>1[]</p>	
<p>globose</p>	<p>Runde Gelbe</p>	<p>2[]</p>	
<p>transverse ellipsoid</p>	<p>Ingelheimer Rote</p>	<p>3[]</p>	
<p>5.2 Fruit: size (30)</p>			
<p>very small</p>	<p>Amerikanische Gebirgstachelbeere</p>	<p>1[]</p>	
<p>small</p>	<p>Early Green</p>	<p>3[]</p>	
<p>medium</p>	<p>Gelbe Triumph</p>	<p>5[]</p>	
<p>large</p>	<p>Grüne Kugel</p>	<p>7[]</p>	
<p>very large</p>	<p>Catherina</p>	<p>9[]</p>	
<p>5.3 Fruit: shape (32)</p>			
<p>globose</p>	<p>Bila</p>	<p>1[]</p>	
<p>ellipsoid</p>	<p>Weißer Volltragende</p>	<p>2[]</p>	
<p>pyriform</p>	<p>Grüne Flaschenbeere</p>	<p>3[]</p>	
<p>5.4 Fruit: color (33)</p>			
<p>yellow</p>	<p>Golden Lion</p>	<p>1[]</p>	
<p>yellow green</p>	<p>Gelbe Triumph</p>	<p>2[]</p>	
<p>green with white tinge</p>	<p>Weißer Neckartaler</p>	<p>3[]</p>	
<p>green</p>	<p>Grüne Kugel</p>	<p>4[]</p>	
<p>medium red</p>	<p>Rokula</p>	<p>5[]</p>	
<p>dark red</p>	<p>Mai Duke, Remarka</p>	<p>6[]</p>	

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics		Example Varieties	Note
5.5	Time of beginning of fruit ripening		
(42)			
	very early	Risulfa	1[]
	early	Mauks Frühe Rote	3[]
	medium	Rote Frankfurter	5[]
	late	Rote Orléans	7[]
	very late	Green Gem	9[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>6. Similar varieties and differences from these varieties</p> <p><i>Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.</i></p>			
Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Fruit: color</i>	<i>yellow</i>	<i>green</i>
<p>Comments:</p>			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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9. Information on plant material to be examined or submitted for examination.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- | | | |
|---|---------|--------|
| (a) Microorganisms (e.g. virus, bacteria, phytoplasma) | Yes [] | No [] |
| (b) Chemical treatment (e.g. growth retardant, pesticide) | Yes [] | No [] |
| (c) Tissue culture | Yes [] | No [] |
| (d) Other factors | Yes [] | No [] |

Please provide details for where you have indicated "yes".

.....

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes []

(please provide details as specified by the Authority)

No []

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]